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The Academic Situation in the Dallas-Fort Worth Region

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A D D R E S S

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Those of us born in this part of Texas have a disproportionate affection for this land and are not to be entirely relied upon in our evaluation of it. Too many of these hydrocarbons have entered our blood; our bones are too closely related to the chalk in these hills; we have seen too often this big sky roll around ever to be really objective in our judgement. And we have seen such rapid changes as to believe that all things are possible. When I look back on my boyhood and remembers herds of cattle plunging through the streets of North Fort Worth, I think Good heavens, this is young country! When I was born, there were four colleges in North Texas: the State Teacher's Normal at Denton, now North Texas University; Austin College, the Presbyterian school at Sherman; the old University of Dallas, soon to go out of operation and its charter to lie dormant until it was picked up by the Catholic diocese ten years ago; and Texas Christian University, recently moved to Fort Worth from Waco. Southern Methodist would open in another year and begin its important service to the region. These were really frontier colleges for a raw and vigorous land; and, unlike the California institutions of higher learning, which bloomed suddenly in the soil of a largely imported civilization, these schools were nurtured by a culture and an economics deeply rooted in the land.

If I were to assess where that puts North Texas now, I think I would resort to a study presently being made of the Southwest Review, the journal published for forty years at SMU. The young

scholar making this study concludes that our region is in a pre-literary stage, ready only now for the work of the imagination which will bring into palpable form the myths, the heroes, the virtues and values which have laced this land together. So, too, I would say that we have been in a pre-scientific age. We have been laying the groundwork for science out of native material. I think of my old physics professor who, in the basement of the gym at TCU, recorded cowboy ballads for Victor and invented a magneto-striction oscillator with which he discovered pasteurization by hypersonic vibrations. Since then we have had a generation of teachers to rear, a network of secondary schools to develop. That job has been done. The base for the scientific age here has been established.

So, too, has the crown. The Graduate Research Center of the Southwest was established a mere four years ago. The building we are in is just a year old, and already the Center, with a staff of more than three hundred, has outgrown its quarters. A very remarkable group of scientists has been gathered from around the world to pursue fundamental research and to interact with the native elements of this region in effecting a community of graduate schools and scholars. These purposes are being realized. Some excellent research has already been produced here and an important international conference (on quasi-stellar masses), was sponsored in Dallas two years ago. Few places in the country have carried out so bold a concept as the Graduate Research Center; few communities were quite so ready to carry it out, backing it financially and at the same time

increasing the support of the other academic institutions of the region.

Ten accredited colleges and universities are located within 50 miles of the accelerator site, and another four institutions in the region offer only graduate or post-doctoral work. Let me name them for you. I. Private: Southern Methodist, Texas Christian, Texas Wesleyan, Bishop College, Austin College, University of Dallas; II. State: North Texas State, Arlington State, East Texas State, Texas Woman's University; III. Institutes: S. W. Medical School, Baylor School of Dentistry and Research, Wadley Research, Graduate Research Center. In addition, the Dallas Baptist College, a new four-year institution, opened this year and six campuses of a massive junior college system will be underway in Fort Worth and Dallas in the next two years.

The enrollment in the fourteen institutions totals a little above 50,000 students--about the same at the total number in the entire state of New Jersey, or Virginia, and more than the total enrollment of 33 states. The growth has been rapid here, from 20,000 ten years ago, and the projections we have made to 100,000 in 1975 are in all likelihood uncharacteristically modest. In this region, then, has been built up one of the great concentrations of undergraduate students in the country. Consequently the pressure for graduate work is immense, inreasing 20% this past year and promising to burst forth at a much higher velocity than the rate those of us who worry about budgets care to predict.

This region is a great consumer of doctoral degrees, granted

almost entirely outside the region. Many of us in education and industry are aware that we must bring nearer to balance our production and our consumption. We have already a respectable history of doctoral degrees oriented toward biological research at our excellent medical school and at Wadley Research Institute, which incidentally received last week two handsome multi-million-dollar gifts for the establishment of a new research center; and the region has also had plentiful advanced degrees in educational disciplines at the state schools. But graduate programs in the standard academic disciplines are exceedingly young in this region. TCU initiated doctoral work in physics and psychology just five years ago and added mathematics and chemistry two years later. SMU began its doctoral program in mechanical engineering two years ago and electrical engineering this year; it had earlier begun an economics doctoral program and had set up in conjunction with the Graduate Research Center a distinguished advanced degree in geophysics. North Texas University was given permission by the State Board this year to offer doctoral work in physics, chemistry, biology, and mathematics; and Texas Woman's University won approval for its radio chemistry program. The University of Dallas will begin its graduate work in the sciences shortly, helped by a 7-½ million dollar gift in memory of the aviation pioneer, Tom Braniff. And all of us in Dallas and Fort Worth expect Arlington State to proceed rapidly to the doctoral level in engineering. Bishop College, with its thus far predominantly Negro student body, expects to enter graduate work in the not-too-distant future. The pressure for graduate work from industry,

education, undergraduate students, and--yes--from the pride of the region, is having its effect.

Advanced work in the humanities and social sciences is not being neglected. But science is taking the lead, as it should and must. TCU has engaged a nuclear physicist, Dr. Leigh Secrest, as Dean of the Graduate School and Head of its Science Foundation. SMU has brought in Dr. Fred Terman from Stanford, one of the great minds in electronics and electrical engineering, to head its Foundation for Science and Engineering.

Perhaps more important than the individual university developments are the inter-institutional cooperative arrangements. Under the generous and statesmanlike leadership of Dr. Willis Tate, President of SMU, many bilateral agreements have been established between universities for the exchange of courses and professors in graduate work, making good use of all the resources available.

But of most importance are two organizations which have been established. One is the Inter-University Council, for the coordination of graduate study. This council is made up of the presidents of private and state schools which now grant doctoral degrees--North Texas, Texas Woman's, SMU, TCU, and Southwestern Medical School--in association with those not yet offering doctoral degrees--Arlington State, University of Dallas, Bishop, and Texas Wesleyan. This organization concerns itself primarily with the mutual use of facilities and the planning of new ones in such a manner as to avoid unnecessary duplication. Studies are underway concerning libraries, centralized computers, television, and other possibilities for shared

use of equipment. Much good will comes from this organization; certainly we can be pleased that wasteful duplication of programs and facilities will be avoided. But, to be perfectly candid, I expect the effect of the Inter-University Council to be ancillary to the development of the individual member institutions.

Not so with the second organization, however, TAGER--The Association for Graduate Education and Research in North Texas. TAGER is composed of private institutions only at present, institutions which are ready to give up a portion of their sovreignty in order to build a powerful graduate organization. SMU, TCU, the Graduate Research Center--University of Dallas, Austin College, Bishop, and Texas Wesleyan--these schools have formed an organization with teeth. This is no paper TAGER. Tager will administer graduate programs and handle a major budget, some 15 million dollars in the next few years. Although degrees will be granted by the individual institutions and various programs will concentrate in given schools, the effect of TAGER will be to create a network of universities and colleges within which professors and students can be interchanged in an unprecedented manner. TAGER is not merely a passive network; it is a generator of programs, making use not only of present faculty members but engaging national authorities to help design programs unsurpassed anywhere in quality and imagination and to help obtain the necessary staff for such programs. The organization has been fortunate to have in its early stages the guidance of Jesse Hobson, whose experience at Stanford Research and broad acquaintance with scientists and administrators across the land have stood us in good stead.

A first meeting with national consultants was held just nine days ago, with an immense response. TAGER has been established to bring this region quickly into the forefront of graduate education and research. It is an arrangement unique in the country and is certain to be emulated. But perhaps it can suceed only in a region suddenly ready for graduate work but exceedingly short of vested interests, old patterns of procedure, and parochial ambitions.

Here, then, is the academic situation--an extensive scientifically based industrial complex with a large scientific community (there are thirty-five scientific societies active in the region), a proud and ambitious citizenry, one of the large undergraduate concentrations in the nation, a galaxy of excellent schools just now moving into extensive graduate work. By the time the first proton circles its magnetic path in the 200-BEV accelerator, wherever it is located, there will have grown up in the Fort Worth-Dallas region one of the leading graduate education and research centers of the world. What will be the direction of its growth? It could be a great center for the study of the structure of matter, a home for the productive young minds in that field who are just now emerging from graduate schools, a mecca for visitors who would study fundamental particles. Nowhere in the nation could the placing of a major high-energy facility so orient studies and so affect the national interest as here, in the Dallas-Fort Worth area, a region determined to take the lead in scientific development.